# (COMPANY LOGO)

# RECLAMATION AND CLOSURE PLAN

**COMPANY AND SITE** 

SUBMITTED TO THE STATE MINE
INSPECTOR'S OFFICE FOR REVIEW AND
APPROVAL IN ACCORDANCE WITH
ARIZONA REVISED STATUTE
TITLE 27 - CHAPTER 6
STATE MINE INSPECTOR AGGREGATE
MINED LAND RECLAMATION

SUBMITTED JANUARY \_\_\_\_\_, 2006

**TABLE OF CONTENTS** 

# 1.0 ADMINISTRATIVE INFORMATION

### 2.0 INTRODUCTION

- 2.1 Purpose and Scope
- 2.2 Reclamation Statement of Responsibility
- 2.3 Reclamation Approach
- 2.4 Current Ownership and Land Use Included in the Aggregate Mining Unit
- 2.5 Proposed Postaggregate Mining Land Use
- 2.6 Description of the Aggregate Mining Unit and Proposed Surface Disturbances
- 2.7 Existing and Proposed Final Topography Including Waste Rock, Stockpiles and Fines Areas
- 2.8 A Narrative Description of Roads that are Proposed
- 2.9 Acreage Affected by Each Type of Surface Disturbance
  - 2.9.1
  - 2.9.2
  - 2.9.3
  - 2.9.4
  - 2.9.5
  - 2.9.6
  - 2.9.7

### 3.0 RECLAMATION

- 3.1 Equipment and Structure Removal
- 3.2 Roads Power Lines, Waterlines and Fences
- 3.3 Area Preparation
- 3.4 Slope Stabilization
- 3.5 Soil Conservation
- 3.6 Revegetation
- 3.7 The Proposed Reclamation Measures to Achieve Post Mine Land Use and Public Safety
- 3.8 Timeline and Phasing of Reclamation
- 3.9 Reclamation Costs Financial Assurance

# **4.0 MINE CLOSURE**

- 4.1 Mining Areas
- 4.2 Processing and Other Areas
- 4.3 Personnel
- 4.4 Monitoring

# **5.0 RESOURCES**

As Applicable

# 6.0 LIST OF TABLES

As Applicable

Ex: Table 1-1 Areas of Disturbance

# 7.0 LIST OF FIGURES

As Applicable Ex: Figure 2-1 Sample Financial Letter

# 1.0 <u>ADMINISTRATIVE INFORMATION</u>

Name of Company Company:

**Address** 

Contact: Name of Company

Address

Fax

Business Phone Cell Phone Email Address

Applicant: Name(s) of Applicant

<mark>Address</mark> Fax

Business Phone Cell Phone Email Address

Permit Name(s) of Permit Technical Consultant(s)

Technical Address
Consultant: Fax

Business Phone Cell Phone Email Address

Landowner: Name of Landowner(s)

<mark>Address</mark> Fax

Business Phone Cell Phone Email Address

Owner Name(s) of Regulatory Contact(s)

Operator: Address of Operation Fax

Business Phone Cell Phone Email Address

# 2.0 INTRODUCTION

# 2.1 PURPOSE AND SCOPE

Company Narrative and Site S	Specific Information	
rehabilitation on the concurrent with or after proper Arizona Aggregate Mined Lar 1201. as authorized by A.R.S format and content prescribed (Arizona Administrative Code associated with an environme	osed mining operations have ceased in accordance with the ads Act (AAMLRA) (Arizona Revised Statutes[A.R.S.] § 27- § 27-1204. This plan has been developed pursuant to the d in the Arizona Aggregate Mined Lands Reclamation Rules at {A.A.C}, R11_3-101, et seq.) account all requirements and the mining operation MRCP submitted to osequently, the MRCP addresses environmental, technical and	Formatted: Font: 12 pt Deleted: 2
2.2 RECLAMATION S'	TATEMENT OF RESPONSIBILITY	
disturbances that are attributa §. 27-1201 and A.C.C. R11-3-disturbed at the site will be reoperations conclude. The ma	assumes responsibility for the reclamation of surface ble to the aggregate mining unit consistent with A.R.S 501 pursuant to that chapter. All areas that have been claimed to a safe and stable condition when mine jority of the site will have been excavated for an open reclamation efforts will focus on reclaiming the pit.	Deleted: 2 Formatted: Font: 12 pt
Signature	Date	
Title		
2.3 RECLAMATION A	PPROACH	
construction that had taken percelamation will take place aft	e-vegetate areas surrounding the pit and will remove all lace on the property for mining operations. All er the mining facility has ceased operation. Concurrent feasible, or necessary, for this type of aggregate	
2.4 CURRENT OWNE AGGREGATE MIN	RSHIP AND LAND USE INCLUDED IN THE	

(Company Name) is currently conducting sand and gravel, ready mix concrete, and hot mix asphalt operations which manufacture materials for the construction industry. The

approximate area of current disturbance as outlined in Table 2-1 is \_\_\_\_\_\_ acres. A total of \_\_\_\_\_ acres will be mined over a \_\_\_\_\_-year period. The extraction/processing operation has consisted of/will consist of removing earthen material for aggregate mining as described in A.R.S. § 27-441. The process includes the use of crushers, screens, conveyors, mobile equipment for the support of production, ready mix concrete plants, asphalt plants, block and tile plants and other construction material related operations.

Material will be/is stockpiled on property for outside sales. Other activities include core drilling, the drilling of wells, stripping of overburden, blasting, loading and dredging. Water for processing is delivered by well or pit de-water, several locations are set aside for recycling and storage of water. Haul roads within the plant perimeter change often as the mining advances. Parking lots may also change location as needed. Further, stationary equipment will move as mining advances.

It is important to note that since electrical needs change it will be necessary to update current power needs in terms of electrical lines or generator sets and on site fuel storage will be necessary to accommodate heavy equipment.

Plant offices, a scale house, parts rooms, driver rooms and storage bunkers will be moved from time to time and additional office area/construction is expected in the future. Berms, fences and landscaping will be placed for environmental, safety and for visual and sound buffers. (Other) are located on the \_\_\_\_\_\_ portion of the \_\_\_\_\_\_-acre parcel.

See Figure 2.1 for current and projected equipment list.

(Company) has estimated the removal of up to \_\_\_\_\_ tons per year over a \_\_\_\_\_-year period.

### 2.5 PROPOSED POSTAGGREGATE MINING LAND USE

Choose option(s) and specify:

- Grazing or other agricultural land use objectives
- Developed water resources, water management projects and existing underground water storage facilities
- Fish or wildlife habitat
- Forestry
- Historic preservation
- Industrial or commercial uses, including tourism
- Recreational uses

- Residential uses
- Scientific or educational uses
- Aggregate mining or remining
- Watercourse channelization
- Other appropriate postaggregate mining use objectives

# 2.6 DESCRIPTION OF THE AGGREGATE MINING UNIT AND PROPOSED SURFACE DISTURBANCES

See Section 2.4 and 2.9

# 2.7 EXISTING AND PROPOSED FINAL TOPOGRAPHY INCLUDING WASTE ROCK, STOCKPILES AND FINES AREAS

See (attached) survey information and proposed final elevations.

### 2.8 A NARRATIVE DESCRIPTION OF ROADS

There will be access roads from the pit to the processing areas and from the entrance to all of the offices, labs, staging areas, the scale house, warehouse and repair shops. Haul roads within the plant perimeter change often as the mining advances. Parking lots may also change location as needed.

# 2.9 ACREAGE EFFECTED BY EACH TYPE OF SURFACE DISTURBANCE

Table 1-1 Areas of Disturbance	
Area Description	Area in Acres
Aggregate Mine Open Pit	E-1 75 5 2222
Landfill (if applicable)	Ex: 75.5 acres
Roads	
Settling Ponds	

Overburden Impoundments	
Process Areas	
Other Disturbed Areas	

# **Area Descriptions:**

- 2.9.1 Aggregate Mine Open Pit
- 2.9.2 Landfill
- 2.9.3 Roads
- 2.9.4 Settling Ponds
- 2.9.5 Overburden Impoundments
- 2.9.6 Process Facilities
- 2.9.7 Other

### 3.0 RECLAMATION

# 3.1 EQUIPMENT AND STRUCTURE REMOVAL

All equipment used for the mining operation (i.e.: crusher, conveyor belts, and ready mix plants) will be removed from the site. Buildings and structures located on the property (job office, repair shop and quality control lab) will be removed when the mining operation concludes. The concrete foundations constructed for the asphalt and concrete plants will be removed at this time and placed in an inert landfill.

Any area that may have been contaminated during the mining operation, such as areas around the repair shop, will be subject to remediation. For example, since small portions of a property will have been subject to activities such as vehicle maintenance they will be reclaimed accordingly.

# 3.2 ROADS, POWER LINES, WATERLINES AND FENCES

Any roads that were constructed exclusively for mining operations at this site will be removed. This does not include existing roadways, such as haul roads to the pit. All haul roads, plant roads, and access roads will be left graded and in usable condition for the

vehicle traffic that may exist in the area. If necessary, roads will be ripped, plowed, scarified and revegetated.

Power lines and water lines that were installed on the property for the mining operation will be removed upon completion of activity. Any and all wells that were installed will be abandoned following Arizona Department of Water of Resources regulations.

Fences installed on the property, and not necessary to maintain public safety, will be removed by request of the lessor.

### 3.3 AREA PREPARATION

Topsoil amendment may be necessary around the perimeters. Grading will take place in order to create contoured slopes around the edges of the pit. The bottom of the pit will be left level and no grading for re-contouring or irregular formations will take place.

#### 3.4 SLOPE STABILIZATION

Reclaimed slopes in the pit will be at a 1 X 1.5 ratio which will minimize erosion and result in geotechnical stability for the area. Soil capping and regrading may be necessary to maintain the integrity of specified areas otherwise, no other physical stabilization will be necessary. Slopes will meet the required specifications consistent with the issued Floodplain Use Permit from \_\_\_\_\_\_\_ County Flood Control District as applicable.

### 3.5 SOIL CONSERVATION

Prusuant to A.R.S. § 27-1274, stockpiles of conserved soil shall be marked with legible signs that identify the stockpile as "SOIL." A soil stockpile will be stabilized, if necessary, to prevent excessive losses from erosion or fugitive dust emissions.

Before redistribution of soil, the regraded land will be treated, if necessary, to reduce the potential for slippage of the redistributed material or to enhance root penetration, or both. Soil and other materials shall be redistributed in a manner that prevents excess compaction and achieves a thickness consistent with the approved postaggregate mining land use as identified in Section 2.5.

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### 3.6 REVEGITATION

Where surface disturbances result in compaction of the soil, ripping, disking, or other means will be employed in areas to in order to reduce compaction and to establish a suitable root zone in specified areas in preparation for planting.

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Revegetation will be conducted to establish plant species that will support the approved postaggregate mining land use as identified in Section 2.5.

Note: The establishment of vegetation species, density, or diversity which is different than pre-existing conditions or on adjacent lands will constitute successful reclamation if the following apply;

 The approved postaggregate mining land use is different than the preaggregate mining land use or the use of adjacent lands;

- 2. The site-specific nature of the surface disturbance, including soil conditions and topography, is such that the establishment of pre-existing or adjacent conditions is not technically or economically practicable; or
- 3. The establishment of different species is preferable for control of erosion,

Revegitation will be conducted during the month of (the most favorable period of the year) to maximize plant establishment.

# 3.7 THE PROPOSED RECLAMATION MEASURES TO ACHIEVE POST MINE LAND USE AND PUBLIC SAFETY

A. What measures will restrict public access to pits or other hazardous surface features?

No structures will remain on site; berms or fences will be installed around all excavations. Where hazards to public safety cannot be reduced by reclamation, weather resistant warning signs, to avoid the areas, will be posted. Further, removal of all scrap metal, wood, trash, and other debris that pose a threat to public safety or create a public nuisance will be addressed.

B. What measures will be taken to address erosion control and stability?

Vegetation will provide the needed erosion control and drainage protection for the slopes of the pit. Roads and other disturbed or compacted areas of the property will be re-vegetated by seeding to control erosion and aid in drainage. All water ponds will be breached to drain, capped and hydro-seeded or left as cattle ponds.

Site specific grading, revegetation, or other proposed control measures shall be conducted, as necessary, to address erosion, no permanent piles of mined material or overburden will be left to restrict drainage.

C. What measures will be taken to address revegitation, conservation, and the care and monitoring of revegetated areas?

The pit will be revegetated after the mining operation has ceased where feasible. The slopes will be revegetated by hydro seeding, a method that offers a higher success rate in plant germination on inclines. The bottom of the pit and the

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office/shop compound area may be seeded by other broadcast methods (i.e. seed drilling).

The final contours and topography will take into account current storm water management plans and which include all natural drainage channels in order to maintain flood and erosion control.

D. For surface disturbances for which the proposed post-aggregate mining land use objective is designated as grazing, fish or wildlife habitat, forestry or recreation, the type of wildlife or fish habitat to be encouraged, including measures that will be taken to encourage that type of wildlife or fish habitat, and that those measures will not be incompatible with the fish or wildlife habitat on adjacent lands.

## 3.8 TIMELINE AND PHASING OF RECLAMATION

Reclamation will begin after each phase of the mining plan is completed. Reclamation of the mining activity shall be designed to minimize hazards to public safety to the extent technically and economically practicable by measures including.

Or

Timeline and Phasing of Reclamation will follow approximately the following schedule.

## 3.9 RECLAMATION COSTS - FINANCIAL ASSURANCE

All reclamation costs will be wholly born by the applicant/lessee.

Financial surety has been obtained by a \_\_\_\_\_\_: (Attached is a copy of the operation's proof of financial assurance)

- Surety Bonds
- Certificates of Deposit
- Trust Funds with Pay-In Period
- Letters of Credit
- Insurance Policy
- Certificates of Self-Insurance
- Cash Deposits with State Treasurer
- Corporate Financial Tests or Gaurentee
- Annuities
- Bonding Pools

## 4.0 MINE CLOSURE

# 4.1 MINING AREAS

Reclamation on the open pit area will commence immediately upon closure of mining operations. There will be no substantial period between operation and reclamation.

# 4.2 PROCESSING AND OTHER AREAS

Reclamation on the processing and related areas will commence immediately upon completion of mining operations. There will be no substantial period between operation and reclamation.

# 4.3 PERSONNEL

Personnel employed at this site will be re-assigned to other sites immediately upon closure.

# 4.4 MONITORING

The closure of operations at this site will be monitored in accordance with the lease agreement and the approved conditions of this plan in accordance with the Arizona State Mine Inspector's Office.

# **5.0 RESOURCES**

As Applicable

# 6.0 LIST OF TABLES

As Applicable

# 7.0 LIST OF FIGURES

<<Company Letterhead>>

January 23, 2006

Mr. Douglas K. Martin Arizona State Mine Inspector Suite 400R 1700 W. Washington Phoenix, AZ 85007-2805

Re: \_\_\_\_\_ Mining Reclamation Plan Submittal

Dear Mr. Martin:

As Company President/Vice President of Finance, I hereby state that (1) Company has all financing commitments necessary to conduct current operations and to meet closure and post-closure costs at Mine Site; and (2) Company has not filed for bankruptcy under any provisions of the United States Bankruptcy Court.

Sincerely,

Financial Agent Vice President Finance